

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
18 January 2001 (18.01.2001)

(10) International Publication Number  
**PCT WO 01/03646 A3**

(51) International Patent Classification<sup>7</sup>: **G01J 3/28**

**AND HUMAN SERVICES [US/US]:** 6011 Executive Boulevard, Suite 325, Rockville, MD 20852-3804 (US).

(21) International Application Number: **PCT/US00/19273**

(22) International Filing Date: **14 July 2000 (14.07.2000)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:  
60/143,801 14 July 1999 (14.07.1999) **US**  
09/507,293 18 February 2000 (18.02.2000) **US**

(71) Applicants: **SPECTRAL DIMENSIONS, INC.**  
[US/US]; Suite 102, 3403 Olandwood Court, Olney,  
MD 20832 (US). **THE GOVERNMENT OF THE**  
**UNITED STATES OF AMERICA** represented by  
**THE SECRETARY, DEPARTMENT OF HEALTH**

(72) Inventors: **LEWIS, E., Neil**; 2440 Saint Albert Terrace,  
Brookville, MD 20833 (US). **STRACHAN, David, J.**; 12  
Wood Raven Court, Baltimore, MD 21234 (US). **KID-**  
**DER, Linda, H.**; 18003 Golden Spring Court, Wolney, MD  
20832 (US).

(74) Agent: **ELBING, Kristofer, E.**; 187 Pelham Island Road,  
Wayland, MA 01778 (US).

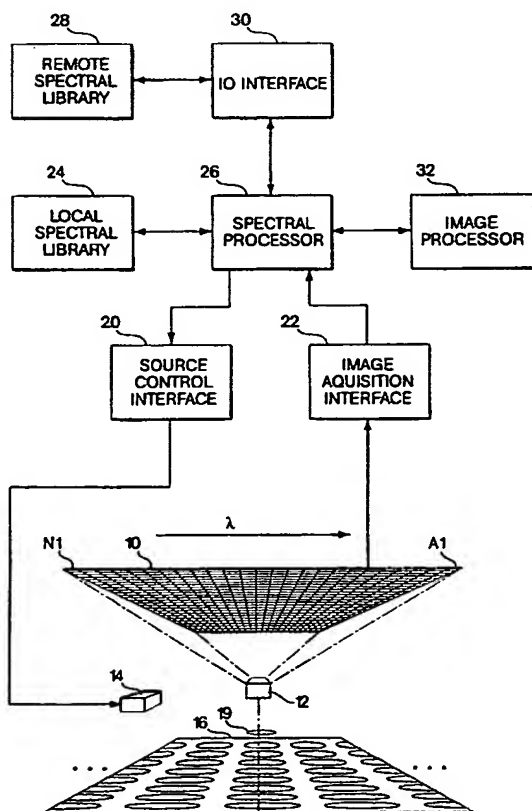
(81) Designated States (*national*): **BR, CA, JP.**

(84) Designated States (*regional*): European patent (AT, BE,  
CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,  
NL, PT, SE).

Published:  
— *With international search report.*

[Continued on next page]

(54) Title: **HIGH-VOLUME ON-LINE SPECTROSCOPIC COMPOSITION TESTING OF MANUFACTURED PHARMACEUTICAL DOSAGE UNITS**



(57) Abstract: A pharmaceutical dosage unit manufacturing process control apparatus is disclosed. This apparatus includes an image sensor (10), including an array of detector elements, located generally proximate a flow of pharmaceutical dosage units (18). A spectrally selective element (12) simultaneously projects a plurality of spectrally-discrete versions of a same image of the flow of pharmaceutical dosage units onto the image sensor. A spectral processor is responsive to an output of the image sensor.

WO 01/03646 A3



(88) Date of publication of the international search report:  
25 May 2001

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*